

**WHAT IS CLAIMED IS:**

1. A media detection system for a cartridge engaging assembly, comprising:

a light source mounted within a cartridge receiving chamber defined by the cartridge engaging assembly;

a cartridge referencing member comprising an arm portion and a head portion, the arm portion being mounted to the cartridge engaging assembly, the head portion being located within the cartridge receiving chamber at a position adjacent said light source, said cartridge referencing member being deflected by the presence of a data cartridge within the cartridge receiving chamber so that said cartridge referencing member blocks light produced by said light source when no data cartridge is located within the cartridge receiving chamber and so that said cartridge referencing member blocks less light produced by said light source when a data cartridge is located within the cartridge receiving chamber; and

a detector assembly coupled to the cartridge receiving chamber for detecting light from said light source.

2. The media detection system of claim 1, wherein the head portion of said cartridge referencing member blocks light produced by said light source.

3. The media detection system of claim 1, wherein said detector assembly detects whether light from the light source is blocked by said cartridge referencing member.

4. The media detection system of claim 1, wherein said head portion further comprises a flag portion, said flag portion substantially blocking all light produced by said light source when no data cartridge is present within the cartridge receiving chamber.

5. The media detection system of claim 4, wherein said cartridge referencing member is partially deflected by a narrow form-factor data cartridge within the cartridge receiving chamber so that said flag portion blocks a portion of light produced by said light source, and wherein said cartridge referencing member is fully deflected by a wide form-factor data cartridge within the cartridge receiving chamber so that said flag portion blocks substantially no light produced by said light source.

6. The media detection system of claim 4, wherein said light source comprises an upper light source and a lower light source and wherein said flag portion comprises a lower section and an upper section, the lower section of said flag portion being shorter than the upper section of said flag portion so that both the upper and lower sections block light produced by the upper and lower light sources when no data cartridge is present within the cartridge receiving chamber.

7. The media detection system of claim 6, wherein the upper section of said flag portion blocks light produced by the upper light source and wherein the lower section of said flag portion blocks substantially no light produced by the lower light source when the narrow form-

factor data cartridge is positioned within the cartridge receiving chamber.

8. The media detection system of claim 6, wherein the upper section of said flag portion and the lower section of said flag portion block substantially no light produced by the upper and lower light sources when the wide form-factor data cartridge is positioned within the cartridge receiving chamber.

9. The media detection system of claim 1, wherein said light source comprises a light emitting diode.

10. The media detection system of claim 1, wherein said detector assembly comprises a charge-coupled device.

11. A method for detecting media within a cartridge engaging assembly, comprising:

producing light within a cartridge receiving chamber of the cartridge engaging assembly; and

preventing light from reaching a detector provided within the cartridge receiving chamber when no data cartridge is contained within the cartridge receiving chamber.

12. The method of claim 11, wherein preventing light further comprises preventing substantially all light from reaching a detector provided within the cartridge receiving chamber when no data cartridge is contained within the cartridge receiving chamber.

13. The method of claim 11, further comprising allowing light to reach the detector when a data cartridge is contained within the cartridge receiving chamber.

14. The method of claim 11, further comprising allowing a portion of light to reach the detector when a narrow form-factor data cartridge is contained within the cartridge receiving chamber.

15. The method of claim 11, further comprising not preventing any light from reaching the detector when a wide form-factor data cartridge is contained within the cartridge receiving chamber.

16. A media detection system, comprising:

light source means for producing light within a cartridge receiving chamber defined by a cartridge engaging assembly;

cartridge referencing means mounted to the cartridge engaging assembly, said cartridge referencing means being displaceable by a cartridge positioned within the cartridge receiving chamber to block light produced by said light source means; and

detector means operatively associated with the cartridge receiving chamber for detecting light.

17. The media detection system of claim 16, wherein said cartridge referencing means blocks substantially all of the light produced by said light source means when no data cartridge is located within the cartridge receiving chamber and so that said cartridge referencing means does not block substantially all of the light when a data

cartridge is located within the cartridge receiving chamber.

18. The media detection system of claim 16, wherein said detector means detects whether light from said light source means is blocked by said cartridge referencing means.

19. The media detection system of claim 16, wherein said cartridge referencing means includes means for partially blocking light from said light source means when a narrow form-factor data cartridge is positioned within the cartridge receiving chamber.

20. The media detection system of claim 16, wherein said cartridge referencing means includes means for not blocking substantially all of the light from said light source means when a wide form-factor data cartridge is positioned within the cartridge receiving chamber.